

Amendments to the Claims

Please amend the claims as follows:

1-33(cancelled)

34. (currently amended) The apparatus of claim 3354, wherein at least a selected one of the reflective liquid crystal light valves includes a plurality of pixels selectively switchable between a dark polarization state and an illuminated polarization state.

35. (previously presented) The apparatus of claim 34, wherein the pixels of the first reflective liquid crystal light valve are to be selectively switched to the dark polarization state to reflect selected portions of the first wavelength band of light, in the first polarization direction, back through the plate-type transfective polarizing beam splitter toward the light source.

36. (previously presented) The apparatus of claim 34, wherein the pixels of the second reflective liquid crystal light valve are to be selectively switched to the dark polarization state to reflect selected portions of the second wavelength band of light, in the second polarization direction, back through the color filter, off the plate-type transfective polarizing beam splitter, toward the light source.

37. (previously presented) The apparatus of claim 34, wherein the pixels of the second reflective liquid crystal light valve are to be selectively switched to the illuminated polarization state to reflect selected portions of the second wavelength band of light, in the first polarization direction, through the color filter and the plate-type transfective polarizing beam splitter toward the projection lens.

38. (previously presented) The apparatus of claim 34, wherein the pixels of the third reflective liquid crystal light valve are to be selectively switched to the dark polarization state to reflect selected portions of the third wavelength band of light, in the second polarization direction, off the color filter and the plate-type transfective polarizing beam splitter toward the light source.

39. (previously presented) The apparatus of claim 34, wherein the pixels of the third reflective liquid crystal light valve are to be selectively switched to the illuminated polarization state to reflect selected portions of the third wavelength band of light, in the first polarization direction, off the color filter through the plate-type transfective polarizing beam splitter toward the projection lens.

40-41 (cancelled)

42. (currently amended) The apparatus of claim 4154, wherein the spectrally selective input device is of an optical retardation type.

43. (currently amended) The apparatus of claim 3354, further comprising:

one or more dichroic trim filters respectively associated with one or more of the first, second, and third light valves, to reflect selected wavelength bands of light without changing their polarization direction.

44-45 (cancelled)

46. (currently amended) The system of claim 4556, wherein
the plate-type transfective polarizing beam splitter is to receive the first, second, and third wavelength bands of light, to transmit, in a first polarization direction, the first wavelength band of light and to reflect in a second polarization direction the second and third wavelength bands of light;
the color filter is to receive the second and third wavelength bands of light, to transmit in the second polarization direction the second wavelength band of light, and to reflect in the second polarization direction the third wavelength band of light; and
the first, second, and third reflective liquid crystal light valves to selectively reflect portions of the respective first, second, and third wavelength bands of light toward the projection lens.

47. (currently amended) The system of claim 4556, wherein at least a selected one of the reflective liquid crystal light valves includes a plurality of pixels selectively switchable between a dark polarization state and an illuminated polarization state.

48. (currently amended) The system of claim 4556, in which the first, second, and third wavelength bands of light each include a selected one of a green, a blue, and a red wavelength band.

49. (currently amended) The system of claim 4556, in which the light source emits the first, second, and third wavelength bands of light in a second polarization direction.

50. (previously presented) The system of claim 46, in which the first and second polarization directions are substantially orthogonal linear polarization directions.

51. (currently amended) The system of claim 4556, further comprising:
each of the first, second, and third wavelength bands of light having selected ones of a first and second polarization direction; and
one or more dichroic trim filters respectively associated with one or more of the first, second, and third reflective liquid crystal light valves, to reflect selected wavelength bands of light without changing their polarization direction.

52. (cancelled)

53. (previously presented) The system of claim 47, further comprising:
a controller, coupled to the video unit, to selectively control the plurality of pixels of the first, second, and third reflective liquid crystal light valves.

54. (new) An apparatus comprising:
a light source to produce light in first, second and third wavelength bands in a second polarization direction;
a spectrally selective input device
to receive the first, second, and third wavelength bands of light from the light source;
to transmit the first wavelength band of light in a first polarization direction;
and
to transmit the second and third wavelength bands of light in the second polarization direction;
a plate-type transfective polarizing beam splitter
to receive the first, second, and third wavelength bands of light,
to transmit, in a first polarization direction, the first wavelength band of light, and
to reflect, in a second polarization direction, the second and third wavelength bands of light;
a color filter
to receive the second and third wavelength bands of light,
to transmit in the second polarization direction, the second wavelength band of light, and
to reflect in the second polarization direction, the third wavelength band of light; and
first, second and third reflective liquid crystal light valves
to selectively reflect portions of the respective first, second and third wavelength bands of light toward a projection lens.

55. (new) An apparatus comprising:
a light source to produce light in first, second and third wavelength bands;
a plate-type transfective polarizing beam splitter selected from the group consisting of a wire grid device, a multi-layer thin film device, a cholesteric polymer liquid crystal device, and a laminated polymer sheet device, the plate-type transfective polarizing beam splitter
to receive the first, second, and third wavelength bands of light,
to transmit, in a first polarization direction, the first wavelength band of light, and
to reflect, in a second polarization direction, the second and third wavelength bands of light;
a color filter
to receive the second and third wavelength bands of light,
to transmit in the second polarization direction, the second wavelength band of light, and
to reflect in the second polarization direction, the third wavelength band of light; and
first, second and third reflective liquid crystal light valves
to selectively reflect portions of the respective first, second and third wavelength bands of light toward a projection lens.

56. (new) A system comprising:
a video unit to output a video signal; and
a projection system, coupled to the video unit, to receive the video signal and project video, said projection system comprising
a light source to produce light in first, second, and third wavelength bands;
a reflective light valve arrangement optically coupled to the light source, comprising
a plate-type transfective polarizing beam splitter selected from the group consisting of a wire grid device, a multi-layer thin film device, a cholesteric polymer liquid crystal device and a laminated polymer sheet device,
a color filter, and
first, second and third reflective liquid crystal light valves;
and
a projection lens optically coupled to the reflective light valve arrangement.